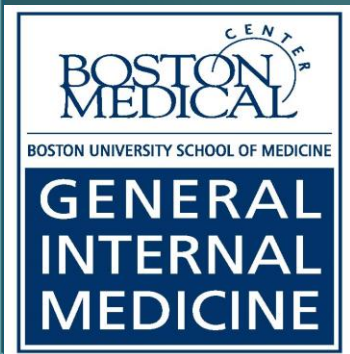


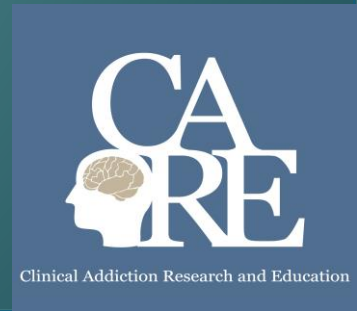
UNHEALTHY ALCOHOL AND OTHER DRUG USE: SCREENING AND DIAGNOSIS

Richard Saitz MD MPH FACP DFASAM

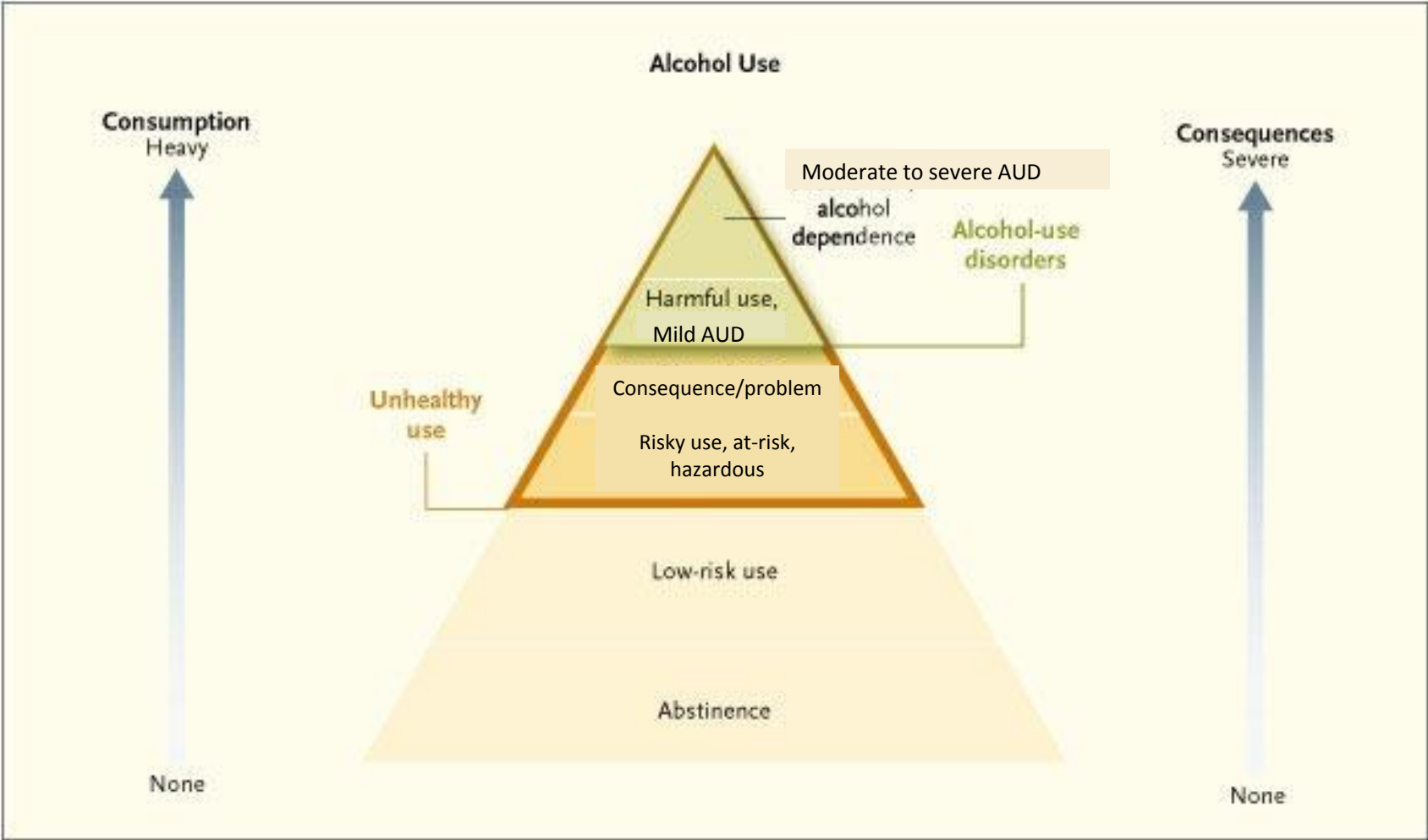
Chair, Department of Community Health Sciences
Professor of Community Health Sciences and Medicine



Boston Medical Center is the primary teaching affiliate of the Boston University School of Medicine.

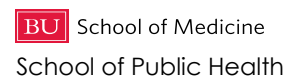


UNHEALTHY USE



Case

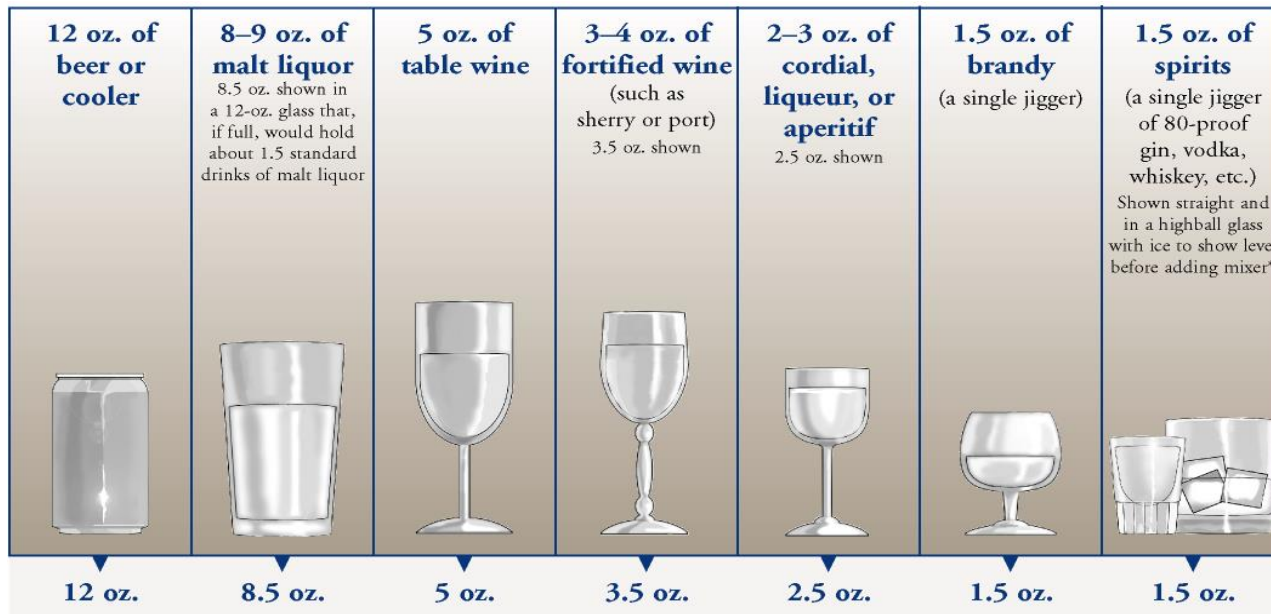
A 29 year old resident enjoys 2-3 beers 2-3 times a week after work





Risky Amounts

- Men
 - >14 drinks per week, >4 per occasion (5+)
- Women, ≥ 65
 - >7 drinks per week, >3 per occasion (4+)



Drugs: Any?

‘Single’ Item (Alcohol)

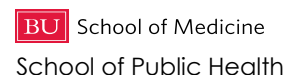
- “Do you sometimes drink beer wine or other alcoholic beverages?”
- “How many times in the past year have you had 5 (4 for women) or more drinks in a day?”
 - **+answer:>0**
 - 82% sensitive, 79% specific for unhealthy use
 - 8 or more c/w dependence
 - » Can be self-administered

NIAAA. Clinicians Guide to Helping Patients Who Drink Too Much, 2007.

Smith PC, Schmidt SM, Allensworth-Davies D, Saitz R. J Gen Intern Med 2009 24:783-8 and erratum. DOI: 1007/s11606-009-0928-6.

Saitz R et al. Journal of Studies on Alcohol and Drugs. 2014;75(1):153-157.

McNeely J et al. Validation for self-administration. J Gen Intern Med. 2015 Dec;30(12):1757-64



Alcohol Use Disorders Identification Test Consumption items (AUDIT-C)

AUDIT-C

Question #1: How often did you have a drink containing alcohol in the past year?	
• Never	(0 points)
• Monthly or less	(1 point)
• Two to four times a month	(2 points)
• Two to three times per week	(3 points)
• Four or more times a week	(4 points)
Question #2: How many drinks did you have on a typical day when you were drinking in the past year?	
• 1 or 2	(0 points)
• 3 or 4	(1 point)
• 5 or 6	(2 points)
• 7 to 9	(3 points)
• 10 or more	(4 points)
Question #3: How often did you have six or more drinks on one occasion in the past year?	
• Never	(0 points)
• Less than monthly	(1 point)
• Monthly	(2 points)
• Weekly	(3 points)
• Daily or almost daily	(4 points)

The AUDIT-C is scored on a scale of 0-12 (scores of 0 reflect no alcohol use). In men, a score of 4 or more is considered positive; in women, a score of 3 or more is considered positive. Replace six with four for women, in item 3

- Requires scoring
- ≥ 3 women, >4 men
 - 73-86% sensitivity
 - 89-91% specificity
- ≥ 7 to 10 suggests moderate to severe disorder

Saitz R. Screening for unhealthy use of alcohol and other drugs. UpToDate 2016.



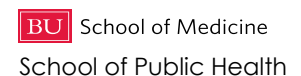
PREVALENCE IN PRIMARY CARE

- Alcohol
 - >1/3 Abstinent
 - >1/3 Low risk
 - <1/3 Unhealthy
 - >1/5 dependent
 - <2/5 problem use (nondependent)
 - <2/5 risky use

What ever happened to the CAGE?
Disorder, Ever
What about laboratory tests?
Less sensitive and more costly

Coulton S, et al. BMJ. 2006;332:511–517.

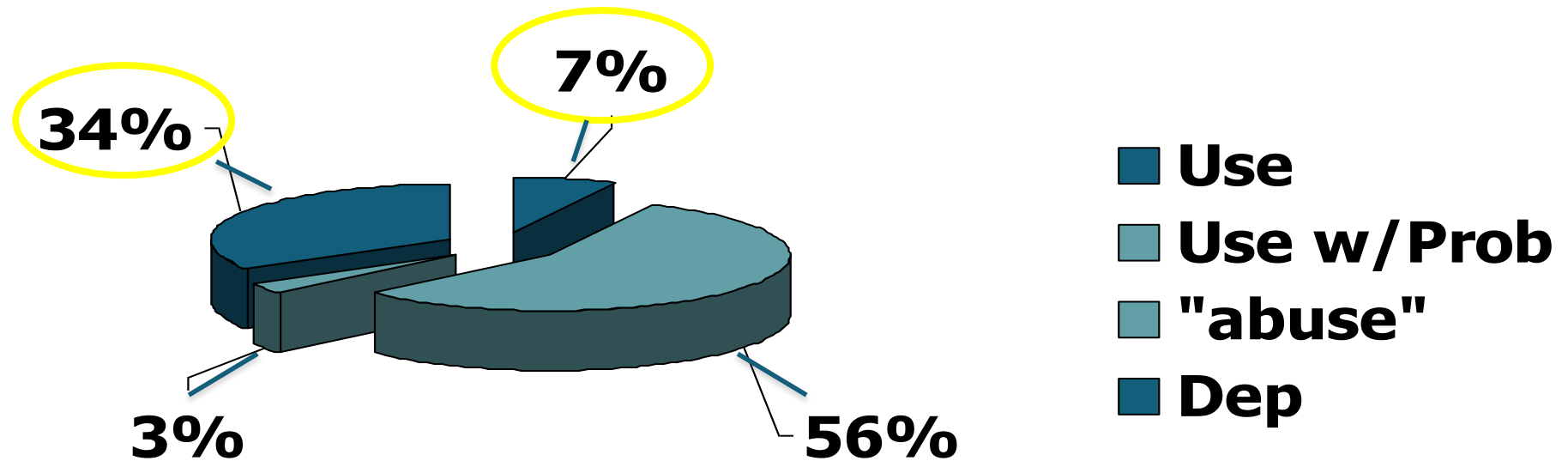
Maisto & Saitz Am J Addict 2003;12:S12-25.



PREVALENCE IN PRIMARY CARE, OTHER DRUGS

3%, most not with alcohol

- 34% of those have dependence, only 7% use with no problems



SINGLE ITEM, OTHER DRUGS

- **“How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?”**
 - If asked to clarify the meaning of “non-medical reasons”, add “for instance because of the experience or feeling it caused”
 - a response of ≥ 1 is considered positive
 - 100% sensitive, 74% specific for drug use disorder, similar to 10-item DAST (n=286)
 - 3 or more c/w dependence
 - Valid for self-administration
 - 93% and 94% sensitive for past-year drug use
 - 82%, 96%, respectively, for saliva test or self-report

*marijuana

LABORATORY TESTS

■ Useful

- detect (heavy) use (usually recent)
- overdose, intoxication, poisoning
- screening trauma patients
- assessment and monitoring

■ Not so useful

- screening for unhealthy use
- general health care settings
- less sensitive for potent substances like LSD, fentanyl, psilocybin, ecstasy, amphetamines, designer drugs, THC, PCP, etc.

- “Routine screen” (urine, serum)
 - Opiates (less often ‘-oids’)
 - Cocaine
 - Benzodiazepines
 - Barbiturates
 - Alcohol
 - ACTM
 - ASA
- Less available/need to request opioids, other specific drugs

SPECIAL POPULATIONS

- Pregnancy
- Adolescence
- Elderly



Assessment—for what? Moderate/severe disorder

Terminology

- Low or lower risk use
- Unhealthy use
 - Hazardous or at-risk
 - Disorder (DSM5)
 - Mild
 - Harmful (ICD 10)
 - Moderate/severe
 - Dependence (ICD 10)

Addiction: loss of control, compulsive use,
use despite harm, a brain disorder www.asam.org

Stop Talking 'Dirty': Clinicians, Language, and Quality of Care for the Leading Cause of Preventable Death in the United States



A patient with diabetes has "an elevated glucose" level. A patient with cardiovascular disease has "a positive exercise tolerance test" result. A clinician *within* the health care setting addresses the results. An "addict" is not "clean"—he has been "abusing" drugs and has a "dirty" urine sample. Someone *outside* the system that cares for all other health conditions addresses the results. In the worst case, the drug use is addressed by incarceration.

On December 9, 2013, the first ever national drug policy reform summit was held at the White House. A major thrust of this summit was to mark a philosophical shift away from the "war on drugs" and toward a broader public health approach. Much of the summit was devoted to addressing the stigma surrounding addiction and the under-recognized importance of language.

Stigma is defined as an attribute, behavior, or condition that is socially discrediting. It is important because of the 23 million Americans who meet criteria for a substance use disorder each year, only 10% access treatment, and stigma is a major barrier to seeking help.¹ A World Health Organization study of the 18 most stigmatized social problems (including criminal behavior) in 14 countries found that drug addiction was ranked number 1, and alcohol addiction was ranked number 4.²

despite harmful consequences. Yet, despite evidence of a strong causal role for genetics and impairment in inhibitory control, stigma is alive and well. Research is now revealing that one contributory factor to the perpetuation of stigma may be the type of language we use.

Use of the more medically and scientifically accurate "substance use disorder" terminology is linked to a public health approach that captures the medical malfunction inherent in addiction. Use of this term may decrease stigma and increase help-seeking. In contrast, tough, punitive, language, including the word "war," in "war on drugs," is intended to send an uncompromising message, "You use, you lose," in the hopes of deterring drug involvement. Accompanying this aggressive rhetoric are terms such as drug "abuse" and drug "abusers," implying willful misconduct (ie, "they *can* help it and it *is* their fault"). This language increases stigma and reduces help-seeking.

Since the 1970s, such language has become the norm. Even our federal health institutions that address addictions have the term "abuse" in their names (eg, National Institute on Drug Abuse), and their materials often refer to affected individuals as substance "abusers." But, does it really matter what we call it? Rhetorical opposition has persisted regarding the use of stigmatizing language, but there was

Kelly JF, Wakeman SE, Saitz R. Stop talking 'dirty': clinicians, language, and quality of care for the leading cause of preventable death in the United States. *Am J Med.* 2015 Jan;128(1):8-9.

ABUSE
ADDICT/ALCOHOLIC
SUBSTITUTION
"MAT"



RISKY / AT-RISK /HAZARDOUS AMOUNTS

- On average, how many **days per week** do you drink alcohol?
- On a **typical day** when you drink how many drinks do you have?
- What is the maximum number of drinks you had on any given **occasion** during the last month?

Alcohol use disorder (DSM 5)

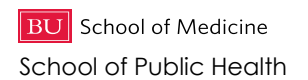
2 or more in 12 mo; 2-3=mild, 4-5=moderate, 6 or more=severe

1. recurrent use resulting in a failure to fulfill major role obligations at work, school, or home
2. recurrent use in situations in which it is physically hazardous
3. continued use despite having persistent or recurrent social or interpersonal problems
4. tolerance
5. withdrawal
6. use in larger amounts or over a longer period than intended
7. persistent desire or unsuccessful efforts to cut down
8. a great deal of time is spent obtaining alcohol, using it, recovering from it
9. important social, occupational, or recreational activities given up or reduced
10. use despite knowledge of related physical or psychological problem
11. craving



HOW TO ASK?

Many options...



Assessment: Patient self-assessment

<http://rethinkingdrinking.niaaa.nih.gov>

RETHINKING DRINKING Alcohol and your health

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Search

HOW MUCH IS TOO MUCH?

What counts as a drink?

Is your drinking pattern risky?

What's the harm?

What are the risks?

What are symptoms of an alcohol use disorder?

How can you reduce your risks?

THINKING ABOUT A CHANGE?

It's up to you

Strategies for cutting down

Support for quitting

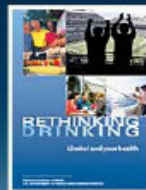
RESOURCES

Tools

Info & help links

Q & As

TAKE IT with you



Download or order

this 16-page booklet,
*Rethinking Drinking:
Alcohol and Your
Health*

[Home >](#)

What are symptoms of an alcohol use disorder?

A few mild symptoms — which you might not see as trouble signs — can signal the start of a drinking problem. It helps to know the signs so you can make a change early. If heavy drinking continues, then over time, the number and severity of symptoms can grow and add up to an "alcohol use disorder." Doctors diagnose an alcohol use disorder, generally known as alcohol abuse or alcoholism, when a patient's drinking causes distress or harm. See if you recognize any of these symptoms in yourself. And don't worry — even if you have symptoms, you can take steps to reduce your risks.

In the past year, have you (check all that apply and click the "Feedback" button, below):

- had times when you ended up drinking more, or longer, than you intended?
- more than once wanted to cut down or stop drinking, or tried to, but couldn't?
- more than once gotten into situations while or after drinking that increased your chances of getting hurt (such as driving, swimming, using machinery, walking in a dangerous area, or having unsafe sex)?
- had to drink much more than you once did to get the effect you want? Or found that your usual number of drinks had much less effect than before?
- continued to drink even though it was making you feel depressed or anxious or adding to another health problem? Or after having had a memory blackout?
- spent a lot of time drinking? Or being sick or getting over other aftereffects?
- continued to drink even though it was causing trouble with your family or friends?
- found that drinking—or being sick from drinking—often interfered with taking care of your home or family? Or caused job troubles? Or school problems?
- given up or cut back on activities that were important or interesting to you, or gave you pleasure, in order to drink?
- more than once gotten arrested, been held at a police station, or had other legal problems because of your drinking?
- found that when the effects of alcohol were wearing off, you had withdrawal symptoms, such as trouble sleeping, shakiness, restlessness, nausea, sweating, a racing heart, or a seizure? Or sensed things that were not there?

[Click for feedback >>](#)

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The questions listed above are based on symptoms for alcohol use disorders in the American Psychiatric Association's *Diagnostic and Statistical Manual (DSM) of Mental Disorders*, Fourth Edition. The DSM is the most commonly used system in the United States for diagnosing mental health disorders.

[<< Previous](#)

[Next >>](#)

Symptoms and signs of disorder or risk

- Abscess
- Burns, injuries
- Heartburn
- Gastrointestinal upset
- AM cough or HA
- Anxiety, stress
- Insomnia
- Concentration
- Memory
- Tachycardia
- Hypertension
- Skin track marks
- Nasal congestion, perforation
- Tremor
- Pupil dilation or constriction
- Menstrual irregularity
- Ecchymosis/purpura
- Palmar erythema
- Scars from trauma
- Gynecomastia
- Hepatomegaly
- Spiders
- Uric acid, glucose
- MCV, AST, HDL, GGT
- Medical history
 - Cellulitis, phlebitis
 - STD/HIV
 - Endocarditis
 - Blackouts
 - Depression
 - Hypertension
 - Trauma
 - Chronic abdominal pain
 - Liver disease
 - Sexual dysfunction
- Sleep disorders
- Use in high risk situations?
- Medical condition
- Medications
- How often maximum?
- Personal or family history?
- Pregnancy
- Interpersonal or work problems
 - Family
 - Work/school
 - Accidents/injuries

FOR ASSESSEMENT

CAGE

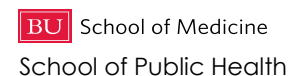
- Have you ever felt you should Cut down on your drinking?
- Have people Annoyed you by criticizing your drinking?
- Have you ever felt bad or Guilty about your drinking?
- Have you ever taken a drink first thing in the morning (Eye-opener) to steady your nerves or get rid of a hangover?

CAGE-AID

- Or drug use?
- Or drug use?
- Or drug use?
- Or used drugs?

Mayfield D et al. Am J Psych 1974;131:1121

Brown RL & Rounds LA. Wisconsin Med J 1995;94:135-40.



Alcohol Use Disorders Identification Test

AUDIT

For item 3 use 5 for men, 4 for women;
 $\geq 4-7$ (8) is positive; ≥ 20 suggests dependence.

CAUTION: Because alcohol use can affect your health and can interfere with certain medications and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential, so please be honest.

Place an X in one box that best describes your answer to each question.

Questions	0	1	2	3	4	
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2 to 4 times a month	2 to 3 times a week	4 or more times a week	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have 5 or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year	
					Total	

Note: This questionnaire (the AUDIT) is reprinted with permission from the World Health Organization. To reflect standard drink sizes in the United States, the number of drinks in question 3 was changed from 6 to 5. A free AUDIT manual with guidelines for use in primary care settings is available online at www.who.org.

2 items suggest (alcohol) disorder

- “In the past year, have you sometimes been under the influence of alcohol in situations where you could have caused an accident or gotten hurt?”
- “Have there often been times when you had a lot more to drink than you intended to have?”

Group	Sensitivity	Specificity
Subjects in the development sample	96%	85%
Subjects in the 3 validation samples	72% to 94%	80% to 95%
Screen-positive subjects in the 3 validation samples	77% to 95%	62% to 86%

SCREENING: TOOLS

NIDAMED

 SCREENING FOR
DRUG USE IN
GENERAL MEDICAL
SETTINGS
Resource Guide

 SCREENING FOR
DRUG USE IN
GENERAL MEDICAL
SETTINGS
Quick Reference Guide



WITHOUT THE WHOLE PICTURE, YOU MIGHT NOT GET THE WHOLE TREATMENT.

To give you the best possible care, your doctor needs to know about any and all drugs you are taking, including tobacco, alcohol, illicit drugs, and over-the-counter and prescription medications—even those not prescribed for you.

**Tell Your Doctor About ALL
The Drugs You Use.**

www.drugabuse.gov/NIDAMED


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 School of Medicine
School of Public Health

SCREENING: TOOLS, ASSIST

STEP 1

Ask the patient about past drug use.

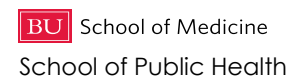
Which of the following substances have you used *in your lifetime*?

- | | |
|---|--|
| a. Tobacco products
(cigarettes, chewing tobacco, cigars, etc.) | h. Sedatives or sleeping pills (Valium, Serepax, Xanax, etc.) |
| b. Alcoholic beverages
(beer, wine, liquor, etc.) | i. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, ecstasy, etc.) |
| c. Cannabis (marijuana, pot, grass, hash, etc.) | j. Street opioids
(heroin, opium, etc.) |
| d. Cocaine
(coke, crack, etc.) | k. Prescription opioids*
(fentanyl, oxycodone, hydrocodone, methadone, buprenorphine, etc.) |
| e. Prescription stimulants* (Ritalin, Concerta, Dexedrine, Adderall, diet pills, etc.) | l. Other—Specify |
| f. Methamphetamine
(speed, ice, etc.) | <small>* Please report nonmedical use only: do not record medications that are used as prescribed by a doctor.</small> |
| g. Inhalants (nitrous, glue, gas, paint thinner, etc.) | |

Patient reports no lifetime drug use:

Reinforce abstinence. Screening is complete.

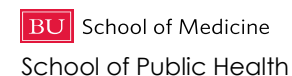
Alcohol, Smoking and Substance Involvement Screening Test. WHO ASSIST Working Group (2002). *Addiction*, 97 (9): 1183-1194



SCREENING: TOOLS, ASSIST

Patient reports lifetime use of one or more substances: Ask the following questions for each drug mentioned (scores will be tallied at the end). For Tobacco and Alcohol, go to page 6.	Never	Once or Twice	Monthly	Weekly	Almost Daily or Daily
	1. In the past 3 months, how often have you used each of the substances you mentioned [first drug, second drug, etc.]?	0	2	3	4
If the answer to Question 1 is "Never," skip to Question 5. Otherwise, continue: In the past three months...					
2. How often have you had a strong desire or urge to use?	0	3	4	5	6
3. How often has your use of [first drug, second drug, etc.] led to health, social, legal, or financial problems?	0	4	5	6	7
4. How often have you failed to do what was normally expected of you because of your use of [first drug, second drug, etc.]?	0	5	6	7	8
For each substance ever used (i.e., those mentioned in the "lifetime" question):		NO	YES, but not in the past three months	YES, in the past three months	
5. Has a friend or relative or anyone else ever expressed concern about your use of [first drug, second drug, etc.]?	0	3	6		
6. Have you ever tried and failed to control, cut down, or stop using [first drug, second drug, etc.]?	0	3	6		
7. Have you ever used any drug by injection? (nonmedical use only)			Recommend HIV/ Hepatitis B & C Testing	Ask about pattern of injecting. Recommend HIV/ Hepatitis B & C Testing	

Alcohol, Smoking and Substance Involvement Screening Test. WHO ASSIST Working Group (2002). *Addiction*, 97 (9): 1183-1194



SCREENING: TOOLS, ASSIST

STEP 2

Determine Risk Level

For each substance (except tobacco and alcohol), add up the scores for questions 1 through 6. To determine patient's risk level and the respective recommendations, see below:

Do this for EACH substance



High risk
Score ≥ 27



- ✓ Provide feedback on the screening results
- ✓ **Advise, Assess, and Assist**
- ✓ **Arrange** referral
- ✓ Offer continuing support

Moderate risk
Score 4-26



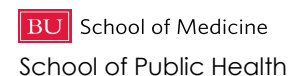
- ✓ Provide feedback
- ✓ **Advise, Assess, and Assist**
- ✓ Consider referral based on clinical judgment
- ✓ Offer continuing support

Lower risk
Score 0-3



- ✓ Provide feedback
- ✓ Reinforce abstinence
- ✓ Offer continuing support

Alcohol, Smoking and Substance Involvement Screening Test. WHO ASSIST Working Group (2002). *Addiction*, 97 (9): 1183-1194



In the past 12 months, how often have you:

- Used any tobacco product (for example, cigarettes, e-cigarettes, cigars, pipes, or smokeless tobacco)?
- {Males} Had 5 or more drinks containing alcohol in one day?
{Females} Had 4 or more drinks containing alcohol in one day?
 - 1 standard drink is about 1 small glass of wine (5 oz), 1 beer (12 oz), or 1 single shot of liquor.
- Used any drugs including marijuana, cocaine or crack, heroin, methamphetamine (crystal meth), hallucinogens, ecstasy/MDMA?
- Used any prescription medications just for the feeling, more than prescribed, or that were not prescribed for you?
 - Prescription medications that may be used in this way include:
 - Opiate pain relievers (for example, Oxycontin, Vicodin, Percocet, methadone).
 - Medications for anxiety or sleeping (for example, Xanax, Ativan, Klonopin).
 - Medications for ADHD (for example Adderall or Ritalin)

Response Options (regarding the past 12 months)

- Daily or almost daily
- Weekly
- Monthly
- Less than monthly
- Never

Gryczynski J, McNeely J, Wu LT, Subramaniam GA, Svikis DS, Cathers LA, Mitchell SG, O'Grady KE, Schwartz RP. Validation of the TAPS-1: A Four-Item Screening Tool to Identify Unhealthy Substance Use in Primary Care. *J Gen Intern Med.* 2017

Substance Use Brief Screen (SUBS)

Instructions: Please check one box for each question			
In the past 12 months, how many days did you have or use...	Three or more days	One or two days	Never
Tobacco?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Four or more alcoholic drinks* in a day, including wine or beer?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any illegal drug, including marijuana?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any prescription medications [¶] "recreationally" ^Δ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Consider a "drink" to be a **can or bottle of beer** (12 ounces), a **glass of wine** (5 ounces), a **wine cooler** (12 ounces), or a **shot of hard liquor** like gin, vodka, or whiskey (1.5 ounces).

¶ Prescription medications are those that are prescribed to you **or** to someone else.

Δ "Recreationally" means taking medications **just for the feeling or experience** they cause, **to get high**, or taking them **more often** or at **higher doses** than prescribed.

Reproduced from: McNeely J, Strauss SM, Saitz R, et al. A brief patient self-administered substance use screening tool for primary care: Two-site validation study of the Substance Use Brief Screen (SUBS). Am J Med 2015; 128:784. Table used with the permission of Elsevier Inc. All rights reserved.

WHY SCREEN?

- To diagnose, treat (medications), any symptom, disease
- To start a conversation that could lead to reducing risk
- To let patients know it is a health risk/condition you address



Summary

- Screen to identify the spectrum of unhealthy use
 - Includes (risky) use, use with consequences, disorder
- Validated questions best
- Incorporate into health history, ask “matter of fact”
- Assess after a positive screening test
 - To confirm unhealthy use
 - To identify moderate/severe disorder (and mild disorder or consequences not meeting disorder criteria)